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<!--StartFragment-->RESULT 1
AAR92216
ID    AAR92216 standard; protein; 116 AA.
XX
AC    AAR92216;
XX
DT    15-JUN-2007 (revised)
DT    28-MAY-1996 (first entry)
XX
DE    LL2 MAb VH region.
XX
KW    Humanised antibody; monoclonal antibody; MAb; LL2; B-cell lymphoma;
KW    leukaemia; therapy; diagnosis; complementarity determining region; CDR;
KW    antibody engineering; BOND_PC;
KW    chimeric anti-B cell lymphoma IgG2a heavy chain variable region;
KW    chimeric anti-B cell lymphoma IgG2a heavy chain variable region [Mus sp.].
XX
OS    Mus musculus.
XX
FH    Key                Location/Qualifiers
FT    Region            31..35
FT                                /label= CDR1
FT                                /note= "claim 9, page 44"
FT    Region            50..66
FT                                /label= CDR2
FT                                /note= "claim 10, page 45"
FT    Region            99..105
FT                                /label= CDR3
FT                                /note= "claim 11, page 45"
XX
PN    WO9604925-A1.
XX
PD    22-FEB-1996.
XX
PF    11-AUG-1995;    95WO-US009641.
XX
PR    12-AUG-1994;    94US-00289576.
XX
PA    (IMMU-) IMMUNOMEDICS INC.
XX
PI    Leung S, Hansen H;
XX
DR    WPI; 1996-139454/14.
DR    N-PSDB; AAT15802.
DR    PC:NCBI; gi998424.
XX
PT    Chimeric and humanised LL2 antibodies - used to produce conjugates for
PT    the therapy and diagnosis of B-cell lymphoma(s) and leukaemia(s).
XX
PS    Claim 5; Page 36-37; 70pp; English.
XX
CC    The complementarity determining regions (CDRs) of mouse monoclonal
CC    antibody (MAb) LL2 VK (AAR92215) and VH (AAR92216) regions were
CC    recombinantly linked to the framework sequences of human VK and VH
CC    regions, respectively, to give humanised LL2 VK (AAR92217) and VH
CC    (AAR92218). These were subsequently linked, respectively, to human kappa
CC    and IgG1 constant regions. A humanised MAb was obtd. that retained the B-
CC    lymphoma and leukaemia cell targeting and internalisation characteristics
CC    of the parental LL2 MAb, and which exhibited a lowered HAMA reaction. It
CC    can be linked to e.g. a cytostatic agent for therapeutic applin
CC

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CC Revised record issued on 15-JUN-2007 : Enhanced with precomputed
 CC information from BOND.
 XX
 SQ Sequence 116 AA;

Query Match 100.0%; Score 620; DB 2; Length 116;
 Best Local Similarity 100.0%; Pred. No. 2.1e-42;
 Matches 116; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 QVQLQESGAELSKPGASVKMSCKASGYTFTSYWLHWIKORPGQGLEWIGYINPRNDYTEY 60
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Db      1 QVQLQESGAELSKPGASVKMSCKASGYTFTSYWLHWIKORPGQGLEWIGYINPRNDYTEY 60

Qy      61 NQNFKDKATLTADKSSSTAYMQLSSLTSEDSAVYYCARRDITTFYWQGGTTLTVSS 116
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<!--StartFragment-->RESULT 2
AAR92215
ID    AAR92215  standard; protein; 113 AA.
XX
AC    AAR92215;
XX
DT    15-JUN-2007  (revised)
DT    28-MAY-1996  (first entry)
XX
DE    LL2 MAb VK region.
XX
KW    Humanised antibody; monoclonal antibody; MAb; LL2; B-cell lymphoma;
KW    leukaemia; therapy; diagnosis; complementarity determining region; CDR;
KW    antibody engineering; BOND_PC;
KW    chimeric anti-B cell lymphoma IgG2a kappa variable region; LL2 VK.
XX
OS    Mus musculus.
XX
FH    Key          Location/Qualifiers
FT    Region       24. .40
FT          /label= CDR1
FT          /note= "claim 6, page 44"
FT    Region       56. .62
FT          /label= CDR2
FT          /note= "claim 7, page 44"
FT    Region       95. .103
FT          /label= CDR3
FT          /note= "claim 8, page 44"
XX
PN    WO9604925-A1.
XX
PD    22-FEB-1996.
XX
PF    11-AUG-1995;   95WO-US009641.
XX
PR    12-AUG-1994;   94US-00289576.
XX
PA    (IMMU-) IMMUNOMEDICS INC.
XX
PI    Leung S,   Hansen H;
XX
DR    WPI; 1996-139454/14.
DR    N-PSDB; AAT15802.
DR    PC:NCBI; gi998422.
XX
PT    Chimeric and humanised LL2 antibodies - used to produce conjugates for
PT    the therapy and diagnosis of B-cell lymphoma(s) and leukaemia(s).
XX
PS    Claim 5; Page 35-36; 70pp; English.
XX
CC    The complementarity determining regions (CDRs) of mouse monoclonal
CC    antibody (MAb) LL2 VK (AAR92215) and VH (AAR92216) regions were
CC    recombinantly linked to the framework sequences of human VK and VH
CC    regions, respectively, to give humanised LL2 VK (AAR92217) and VH
CC    (AAR92218). These were subsequently linked, respectively, to human kappa
CC    and IgG1 constant regions. A humanised MAb was obtd. that retained the B-
CC    lymphoma and leukaemia cell targeting and internalisation characteristics
CC    of the parental LL2 MAb, and which exhibited a lowered HAMA reaction. It
CC    can be linked to e.g. a cytostatic agent for therapeutic appin
CC
CC    Revised record issued on 15-JUN-2007 : Enhanced with precomputed

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CC information from BOND.
 XX
 SQ Sequence 113 AA;

Query Match 100.0%; Score 589; DB 2; Length 113;
 Best Local Similarity 100.0%; Pred. No. 4.7e-40;
 Matches 112; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 DIQLTQSPSSLAVSAGENVTMSCKSSQSVLYSANHKNYLAWYQQKPGQSPKLLIYWASTR 60
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Db      1 DIQLTQSPSSLAVSAGENVTMSCKSSQSVLYSANHKNYLAWYQQKPGQSPKLLIYWASTR 60

Qy      61 ESGVPDRFTGSGSGTDFTLTISRQVEDLAIYYCHQYLSSWTFGGGKLEIK 112
          |||
Db      61 ESGVPDRFTGSGSGTDFTLTISRQVEDLAIYYCHQYLSSWTFGGGKLEIK 112
<!--EndFragment-->
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<!--StartFragment-->RESULT 8
AAW66099
ID      AAW66099 standard; protein; 123 AA.
XX
AC      AAW66099;
XX
DT      10-DEC-1998 (first entry)
XX
DE      anti-CD22 monoclonal antibody heavy chain variable region.
XX
KW      anti-CD22 monoclonal antibody heavy chain variable region; VL;
KW      Pseudomonas exotoxin; variable heavy chain; VH; variable light chain;
KW      malignant B-cell; immunodiagnosis; RFB4 IgG.
XX
OS      Mammalia.
XX
FH      Key                      Location/Qualifiers
FT      Misc-difference 121
FT      /note= "Encoded by gtc"
XX
PN      WO9841641-A1.
XX
PD      24-SEP-1998.
XX
PF      19-MAR-1998; 98WO-US005453.
XX
PR      20-MAR-1997; 97US-0041437P.
XX
PA      (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI      Fitzgerald D, Pastan I, Mansfield E, Kreitman R;
XX
DR      WPI; 1998-521227/44.
DR      N-PSDB; AAV07642.
XX
PT      Recombinant anti-CD22 antibodies and immuno-conjugates - of antibodies
PT      linked to a therapeutic agent, e.g. Pseudomonas exotoxin or a label; for
PT      inhibiting malignant B-cells.
XX
PS      Claim 6; Fig 1; 71pp; English.
XX
CC      The invention claims for a recombinant immunoconjugate comprising of a
CC      therapeutic agent (e.g Pseudomonas exotoxin) or a detectable label
CC      peptide bonded to a recombinant anti-CD22 antibody (RFB4 IgG) having the
CC      present variable heavy (VH) chain with a cysteine residue at amino acid
CC      44 and a variable light (VL; AAW66098) chain with a cysteine residue at
CC      amino acid 100. The immunoconjugate is claimed to inhibit the growth of
CC      malignant B-cells in vivo, such as rodent, canine or primate B-cells. The
CC      anti-CD22 antibody is claimed useful for detecting CD22 protein in a
CC      sample or in vivo in a mammal, and can be used in diagnostic kits
XX
SQ      Sequence 123 AA;

Query Match          99.4%; Score 644; DB 2; Length 123;
Best Local Similarity 99.2%; Pred. No. 4.3e-52;
Matches 122; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 EVQLVESGGGLVPGGSLKLSCAASGFAFSIYDMSWVRQTPEKRLWEVAYISSGGGTTY 60
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Db      61 PDTVKGRTISRDNAKNTLYLQMSSLKSEDTAMYYCARHSGYSSYGVLFAYWGQGLVT 120

Qy      121 VSA 123
      ||
Db      121 TSA 123
<!--EndFragment-->
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<!--StartFragment-->RESULT 3
AAW66098
ID    AAW66098 standard; protein; 107 AA.
XX
AC    AAW66098;
XX
DT    10-DEC-1998 (first entry)
XX
DE    anti-CD22 monoclonal antibody light chain variable region.
XX
KW    anti-CD22 monoclonal antibody light chain variable region; VL;
KW    Pseudomonas exotoxin; variable heavy chain; VH; variable light chain;
KW    malignant B-cell; immunodiagnosis; RFB4 IgG.
XX
OS    Mammalia.
XX
PN    WO9841641-A1.
XX
PD    24-SEP-1998.
XX
PF    19-MAR-1998; 98WO-US005453.
XX
PR    20-MAR-1997; 97US-0041437P.
XX
PA    (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI    Fitzgerald D, Pastan I, Mansfield E, Kreitman R;
XX
DR    WPI; 1998-521227/44.
DR    N-PSDB; AAV07641.
XX
PT    Recombinant anti-CD22 antibodies and immuno-conjugates - of antibodies
PT    linked to a therapeutic agent, e.g. Pseudomonas exotoxin or a label; for
PT    inhibiting malignant B-cells.
XX
PS    Claim 6; Fig 1; 71pp; English.
XX
CC    The invention claims for a recombinant immunoconjugate comprising of a
CC    therapeutic agent (e.g Pseudomonas exotoxin) or a detectable label
CC    peptide bonded to a recombinant anti-CD22 antibody (RFB4 IgG) having a
CC    variable heavy (VH; AAW66099) chain with a cysteine residue at amino acid
CC    44 and the present variable light (VL) chain with a cysteine residue at
CC    amino acid 100. The immunoconjugate is claimed to inhibit the growth of
CC    malignant B-cells in vivo, such as rodent, canine or primate B-cells. The
CC    anti-CD22 antibody is claimed useful for detecting CD22 protein in a
CC    sample or in vivo in a mammal, and can be used in diagnostic kits
XX
SQ    Sequence 107 AA;

Query Match          99.5%; Score 559; DB 2; Length 107;
Best Local Similarity 99.1%; Pred. No. 7.4e-34;
Matches 106; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      1 DIQMTQTSSLSASLGRVITISCRASQDISNYLWYQKQKPDGTVKLLIYYSILHSGVPS 60
Db      1 DIQMTQTSSLSASLGRVITISCRASQDISNYLWYQKQKPDGTVKLLIYYSILHSGVPS 60

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Db      61 RFSGSGSGTDYSLTISNLEQEDFATYFCQQGNTLPWTFGGGKLEIK 107
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